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7590	12/29/2004		EXAMINER	
Browdy and Neimark PLLC 624 Ninth Street NW Washington, DC 20001-5303			SHEW, JOHN	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/666,856	BINDER, YEHUDA	
Examiner	Art Unit		
John L Shew	2664		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 June 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) \_\_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-27 is/are rejected.

7)  Claim(s) 14 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. Applicant's arguments with respect to claims 1-27 have been considered but they are not persuasive. Rejections based on the newly cited reference(s) follow.

### ***Claim Objections***

2. Claim 14 lines 4-5 recites the limitation "each pair providing a packed based digital data communication channel". There is insufficient antecedent basis for this limitation in the claim as "packed based" is not defined.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 5-15, 21-22, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer (Patent Number 3975594) in view of Diab (Patent Number 6541878).

Claim 1, Guntersdorfer teaches a communication network for providing simultaneous data and analog telephone communication between a central location and at least one remote location (sole patent figure) referenced by B for the video data, F for the audio telephone, Tn for the remote subscriber station, A for the central exchange switching center, the communication network comprising a central device referenced by A the central exchange switching center, a central telephone device, referenced by W branch circuit encompassing (column 2 lines 34-38) voice frequencies and telephone control signals, for each remote location a remote digital device a remote telephone device is inherent from the presence of A the exchange switching center which is known in the art to support a plurality of Tn subscriber stations, a cable having a remote end at the respective remote location (sole patent figure) referenced by the balanced line pairs Ltg to remote end Tn, and a near end at the central location (sole patent figure) referenced by the balanced line pairs Ltg to near end A, said cable including including at least two pairs of conductors (column 2 lines 16-18) referenced by Ltg, each pair operative as a data channel for carrying data signals between remote device and said central device (column 2 lines 9-12) referenced by transmission of video data, and said at least two pairs cooperatively forming a phantom channel (column 2 lines 26-30) referenced by

central taps of transformers U1, U3 and central taps of transformers U2, U4, operative to carry telephone signals between said remote telephone device and said central telephone device (column 2 lines 34-38) referenced by telephone signals.

Guntersdorfer does not teach a local area network nor packet based digital device. Diab teaches a local area network using a phantom circuit (FIG. 1, column 1 lines 11-36) referenced by the Ethernet protocol used in local area network. Diab teaches a packet based digital device connected to the phantom circuit (FIG. 1, FIG. 2B, column 3 lines 23-33) referenced by the Printed Circuit Board's Ethernet jack 44 using the phantom circuit wherein the Ethernet protocol is packet based. Diab teaches the use of a digital device (column 1 lines 16-23, lines 36-40) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface. The use of Ethernet inherently implements the use of a digital device inclusive of a computer at the remote end subscriber station and a digital device inclusive of a hub at the central end switching center.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose providing power for telephonic communications over digital data line.

Claim 2, Guntersdorfer teaches two signal transformers at each end of said cable each signal transformer having a primary winding and a secondary winding (column 2 lines 26-30) referenced by transformers U1, U2, U3 and U4, the primary winding having a

center-tap wherein the two conductors of each pair are connected at each of their ends to the ends of the primary winding of a corresponding one of said transformers (sole patent figure) referenced by cable of device F to center-tap of transformers U1, U3, and wherein the ends of the respective secondary winding of each of said two transformers at the remote end of said cable are connected to the respective remote device (sole patent figure) referenced by the secondary winding of transformers U1 and U3 to remote device B, the ends of the respective second winding of each of said two transformers at the near end of said cable are connected to the central device (sole patent figure) referenced by the secondary winding of transformers U2 and U4 to near end device A exchange switching center, said center-taps of each of said two transformers at the remote end of said cable cooperatively form a remote port of said phantom channel and are connected to the respective remote telephone device (sole patent figure) referenced by the center-taps of transformers U1 and U3 phantom channel are connected to F audio telephone, and said center-taps of each of said transformers at the near end of said cable cooperatively form a remote port of said phantom channel and are connected to a central telephone device (sole patent figure, column 2 lines 34-38)) referenced by cable between U2, U4 and branch circuit W carrying voice frequencies and telephone signals. Guntersdorfer does not teach the use of a digital device. Diab teaches the use of a digital device (column 1 lines 16-23, lines 36-40) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface. The use of Ethernet inherently implements the use of a digital device inclusive of a computer at the remote end subscriber station and a digital

device inclusive of a hub at the central end switching center. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

Claims 5, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer and Diab as applied to claims 1, 2 above. Further, Diab teaches the two transformers at the remote end are directly housed inside the remote digital device (FIG. 2B) referenced by transformers 14 housed on the PCB of the digital device. The location of the transformers is unimportant in view of their functionality. The implementation of the location of the transformers is effective on the cable or within the housing of the digital device or within the housing of the telephone device. Applicant has not disclosed that incorporation of the transformers within the housing of the telephone device provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art would have expected applicant's invention to perform equally well when incorporated within the housing of the telephone device as specified in claims 6 and 8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose providing power for telephonic communications over digital data line.

Claim 7 is rejected as being unpatentable over Guntersdorfer. Guntersdorfer teaches two transformers at the near ends of the cable are directly housed inside the central digital device (sole patent figure) referenced by the position of transformers U2 and U4 located within exchange switching center A.

Claim 9, Guntersdorfer teaches a phantom circuit carrying video and telephonic communications. Guntersdorfer does not teach IEEE802.3 protocol. Diab teaches data channels conforms to the IEEE802.3 standard (column 1 lines 11-23) referenced by the communication conducted through the IEEE 802.3 Ethernet standard. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose providing power for telephonic communications over digital data line.

Claim 10, Guntersdorfer teaches a circuit for providing simultaneous data and telephone communication between two locations (sole patent figure) referenced by remote subscriber station location Tn and near exchange switching center location A, said circuit comprising a plurality of pairs of conductors referenced by conductors e and f, opposite ends of each pair of conductors being respective ones of the two locations (sole patent figure) referenced by locations of transformers U1, U3, U2 and U4, and each pair operative as a respective data channel for carrying data between the two

locations (column 2 lines 9-12) referenced by video data one in each direction, at least two of said pairs cooperatively forming at least one phantom channel operative to carry telephone signals between the two locations (column 2 lines 20-23, lines 52-54)

referenced a phantom circuit connected to a telephone at the remote end Tn.

Guntersdorfer does not teach a local area network nor packet based digital data.

Diab teaches a local area network using a phantom circuit (FIG. 1, column 1 lines 11-36) referenced by the Ethernet protocol used in local area network. Diab teaches a packet based digital device connected to the phantom circuit (FIG. 1, FIG. 2B, column 3 lines 23-33) referenced by the Printed Circuit Board's Ethernet jack 44 using the phantom circuit wherein the Ethernet protocol is packet based. Diab teaches the circuitry connected to said plurality of pairs of conductors for supplying packet based digital data signals to each said data channel and telephone signals to said at least one phantom channel (FIG. 5, column 1 lines 16-23, lines 36-40) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface to a RJ-45 jack as shown in pinout on right side of Figure 5. The use of Ethernet inherently implements the use of a digital device inclusive of a computer at the remote end subscriber station and a digital device inclusive of a hub at the central end switching center.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose providing power for telephonic communications over digital data line.

Claim 11, Guntersdorfer teaches a signal transformer at each end of each of said at least two pairs of conductors each signal transformer having a primary winding and a secondary winding (sole patent figure) referenced by transformers U1, U3, U2 and U4 where the primary winding side is the cable side and the secondary winding side is the device side, the primary winding having a center-tap referenced by center-tap cables connecting devices F and W, wherein said at least two pairs of conductors are connected at each of their ends to respective ends of the primary winding of a respective signal transformer (sole patent figure) referenced by the wire pairs e and f connecting primary windings of transformers U1 U2 U3 and U4, and respective ends of the secondary winding of each of said signal transformers form connection points to a corresponding one of said data channels (sole patent figure) referenced by data device B and exchange switching center A, and said center-taps form connection points to a corresponding one of said at least one phantom channel (column 2 lines 20-23, lines 52-55) referenced the telephone connection to the center-tap phantom channel.

Claims 12, 13, Guntersdorfer teaches including at least two pairs of conductors (sole patent figure) referenced by conductor pairs e and f, and a single phantom (sole patent figure) referenced by phantom circuit to devices F and W, wherein said plurality of pairs is N pairs and said at least one phantom channel is N-1 phantom channels (sole patent figure) referenced by allowing N equal to value of 2 depicts 2 pairs as shown by e and f

thereby setting the phantom channel to N-1 channels equal to 1, which is taught by Guntersdorfer as referenced above.

Claims 14, 15, Guntersdorfer teaches a communication network for providing data and analog telephone communication between a first location and a second location (sole patent figure) referenced by subscriber station first location Tn and exchange switching center second location A, that comprises at least one cable between a first and a second location, referenced by Ltg between Tn and A, each cable including at least two pairs of conductors (sole patent figure) referenced by pairs e and f, each pair providing data communications channel between respective devices at the two locations (column 2 lines 9-12) referenced by video data in each direction.

Guntersdorfer does not teach digital packet communications nor a kit for additionally providing a telephone channel cable based on center-taps of transformers. Diab teaches a LAN digital packet communications through an Ethernet connector which implements the interface kit function (FIG. 6, column 7 lines 42-59), referenced by connector 120, simultaneously providing over two pairs of conductors referenced by 130a, 130c, 130e and 130g, a telephone channel between respective telephone devices (column 6 lines 10-14) referenced telephone communication, comprising two pairs of signal transformers referenced by 18a and 18b, at least one pair for each end of the cable is inherent by providing identical kit at each cable end, and each having a primary winding referenced by pins 1 and 2, and a secondary winding referenced by pins 130a and 130c, the primary winding having a center-tap referenced by pin 130d, wherein

respective ends of primary winding of each of said signal transformers are adapted to be connected to respective end of said pairs of conductors (FIG. 6) referenced by conductor cable pins 1, 2, 3 and 6, respective ends of the secondary winding of two of said signal transformers are adapted for connection to a remote digital device (FIG. 2B) referenced a PCB implementing an Ethernet interface, and respective center-taps of each of pair of signal transformers are adapted for connection to a respective telephone device (FIG. 6, column 6 lines 10-14) referenced by pins 130d and 130h supporting – 48v used for telephone communications. Diab teaches housing the signal transformers in a discrete module (column 4 lines 23-29) referenced by the integrated magnetics module. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

Claims 21, 22, Guntersdorfer teaches a device connectable to at least two pairs of conductors for conveying data therethrough to and from at least one other device (sole patent figure, column 2 lines 9-12) referenced by line pairs e and f transmitting video data, the device being also connectable to at least one local telephone device operative to transmit signals between said at least one local telephone device and at least one other telephone device over said at least two pairs of conductors in a phantom channel mode (sole patent figure, column 2 lines 26-30) referenced by audio telephone F and branch circuit W using phantom channel. Guntersdorfer does not teach a digital device.

Diab teaches the use of a digital packet based device (column 1 lines 16-23, lines 36-40) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface. Further, Diab teaches a digital device comprising at least two signal transformers each having a center-tapped primary winding whose ends are connectable to a corresponding one of said pairs of conductors and whose center-tap is connectable to said at least one local telephone device (FIG. 6, column 6 lines 9-14) referenced by transformers 18a and 18b with center-taps 20c and 20d providing -48v to a telephone device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

Claims 26, 27, Guntersdorfer teaches a method for enabling a bundle of at least two pairs of conductors (sole patent figure, column 2 lines 5-12, lines 26-30) referenced by e and f, which are normally operative to convey data between two devices referenced by video telephone B and exchange switching center A, to also simultaneously convey signals between two telephone devices referenced by audio telephone F and branch circuit W, the method comprising providing a first connection of a phantom channel in association with the at least two pairs of conductors at a first end thereof (sole patent figure) referenced by center-tap cable to audio telephone F, and providing a second

connection of a phantom channel in association with the at least two pairs of conductors at a second end thereof (sole patent figure) referenced by center-tap cable to branch circuit W, thus allowing two telephone devices to be connected to the first and second phantom channels respectively referenced by audio telephone F and branch circuit W. Guntersdorfer does not teach a digital device. Diab teaches the use of a LAN packet based digital device (column 1 lines 16-23, lines 36-40, FIG.2B) referenced by IEEE802.3 known as Ethernet implemented through the Printed Circuit Board's PHY interface. Diab teaches the use of a phantom circuit on the Ethernet connector for a telephone connection (FIG. 6, column 6 lines 3-6). Further Diab teaches inserting a first pair of signal transformers having center-tapped primary windings at a first end of the cable with respective ends of the primary windings connected to respective conductors of the cable (FIG. 6) referenced by connector 120 containing transformers 18a and 18b, center-taps 20c and 20d, and primary winding pins 1, 2, 3 and 6. A second connector with identical circuitry is inherently required at the far end of the cable to support matching communications. Thereby allowing respective secondary windings of each signal transformer to be connected to the digital devices and allowing the respective center-taps of the signal transformers to be connected to telephone equipment (FIG. 6, column 3 lines 7-21) referenced by the power voltage source to the telephone with Ethernet connections for the Rx and Tx pairs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in

place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal.

1. Claims 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diab in view of Bux (Patent Number 4510493).

Claims 23, 24, Diab teaches a combination connector for pluggably connecting a digital device and a telephone device to respective ends of at least two conductor pairs to simultaneously convey data to/from the digital device and telephone signals to/from the telephone device (FIG. 6, column 1 lines 24-35, column 6 lines 10-14) referenced by IEEE802.3 RJ-45 Ethernet connector interface to a digital device across pins 1, 2, 3, 6 and phantom power enabling telephone communications across pins 130d, 130h, a first connector having at least two pairs of contacts referenced by pins 1, 2, 3 and 6, and a second connector having at least one pair of contacts disposed proximate the first connector (FIG. 6) referenced by pins 130d and 130h in close proximity of pins 1,2,3 and 6, at least one pair of signal transformers (FIG. 6) referenced by transformers 18a and 18b, each having a primary winding whose ends are adapted to be connected to respective conductor pairs (FIG. 6) referenced by pins 1, 2, 3 and 6, a secondary winding of each signal transformer connected to a respective one of the pair of contacts

of the first connector (FIG. 6) referenced by pins 130a, 130c, 130e and 130g, and respective center-taps of each of the two primary windings connected to the pair of contacts in the second connector (FIG. 6) referenced by pins 130d and 130h . Further Diab teaches a plug assembly for removably coupling with a socket of the data network (FIG. 2B) referenced by plug assembly 44, socket 10 of PCB for Ethernet digital device. Diab does not teach an outlet.

Bux teaches center-tap transformers (FIG. 3, column 5 lines 32-38) referenced by the transformers TR1 and TR2 for at least one remote location (FIG. 1) referenced by station ST1, a wall outlet directly or indirectly attached to a wall and connecting the two transformers with a phantom circuit (column 3 lines 1-9, column 3 lines 53-60) referenced by the wall receptacle attached to the transformers TR1 and TR2, the combination outlet being dimensioned to conform to an existing wall connector of a data communication network (column 3 lines 1-9, column 3 lines 53-60) referenced by the wall receptacle to facilitate the pre-wiring of the building.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transformers to a wall receptacle as taught by Bux to the phantom Ethernet interface network of Diab for the purpose of combining functions within an existing outlet.

Claim 25, Diab teaches a combination connector being disposed within a plug assembly (FIG. 2B) referenced by plug 44 and jack 42, further including a plug having at least two pairs of contacts each connected to the primary windings of a respective one of the

signals transformers (FIG. 6, column 1 lines 24-35, column 6 lines 10-14) referenced by IEEE802.3 RJ-45 Ethernet connector interface to a digital device across pins 1, 2, 3, 6, connecting to signal transformers 18a and 18b, for removably coupling with a socket outlet of a data network (FIG. 2B) referenced by removable plug 44.

2. Claims 3-4, 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guntersdorfer and Diab as applied to claims 1-2, 5-15, 21-22, 26-27 above, and further in view of Bux et al.

Claim 3, Guntersdorfer teaches a communication network for providing simultaneous data and analog telephone communication between a central switching center and subscriber station. Diab teaches the use of digital packet Ethernet incorporating a phantom circuit. Guntersdorfer and Diab does not teach a wall outlet containing transformers.

Bux teaches center-tap transformers (FIG. 3, column 5 lines 32-38) referenced by the transformers TR1 and TR2 for at least one remote location (FIG. 1) referenced by station ST1, a wall outlet directly or indirectly attached to a wall and containing said two transformers for connecting to the remote end of said cable (column 3 lines 1-9, column 3 lines 53-60) referenced by the wall receptacle attached to the transformers TR1 and TR2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transformers to a wall receptacle as taught by Bux to the phantom Ethernet interface network of Guntersdorfer and Diab for the purpose of combining functions within an existing outlet.

Claim 4, Guntersdorfer teaches a communication network for providing simultaneous data and analog telephone communication between a central switching center and subscriber station. Diab teaches the use of digital packet Ethernet incorporating a phantom circuit. Guntersdorfer and Diab does not teach an outlet dimensioned to an existing wall outlet.

Bux teaches said wall outlet is dimensioned to conform to an existing wall connector of a data communication network (column 3 lines 1-10, lines 53-65) referenced by the transformers to the wall receptacle of a room to facilitate the pre-wiring of the building.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transformers to a wall receptacle as taught by Bux to the phantom Ethernet interface network of Guntersdorfer and Diab for the purpose of combining functions within an existing outlet.

Claims 16, 17, Guntersdorfer teaches a communication network for providing simultaneous data and analog telephone communication between a central switching center and subscriber station. Diab teaches the use of Ethernet incorporating a phantom circuit. Guntersdorfer and Diab does not teach a wall connector.

Bux teaches a discrete module center-tap transformers (FIG. 3, column 5 lines 32-38) referenced by the transformers TR1 and TR2 using phantom circuits, is connected to a wall connector which is directly or indirectly attachable to a surface of a building (column 3 lines 1-9, column 3 lines 53-60) referenced by the wall receptacle in a room. Bux teaches the wall connector is dimensioned to conform to an exiting wall connector of a data communication network (column 3 lines 1-9, column 3 lines 53-60) referenced by the wall receptacle to facilitate the pre-wiring of the building.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transformers to a wall receptacle as taught by Bux to the phantom Ethernet interface network of Guntersdorfer and Diab for the purpose of combining functions within an existing outlet.

Claim 18, Guntersdorfer teaches a phantom circuit for video and telephonic communications. Guntersdorfer does not teach a wall kit. Diab teaches an Ethernet RJ-45 connector (column 1 lines 28-35), a connector having at least two pairs of contacts and a second female connector having at least one pair of contacts (FIG. 6 connector 120, column 8, input/output pinout table) referenced by connector output pins 1, 2, 3 and 6, second connector input pins 2 and 4, at least one pair of signal transformers each having a primary winding whose ends are adapted to be connected to respective conductor pairs (FIG. 6) referenced by transformers 18a and 18b associated to output pins 1, 2, 3 and 6, a secondary winding of each signal transformer connected to a respective one of the pair of contacts of the first female connector (column 8,

input/output pinout table) referenced by input pins 1, 3, 5 and 7, and respective center-taps of each of the primary windings connected to a corresponding pair of the at least one pair of contacts in the second female connector (column 8, input/output pinout table) referenced by input pins 2, 4, 6 and 8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an Ethernet interface using digital data as taught by Diab in place of the analog video data as taught in the communication network of Guntersdorfer for the purpose of a more accurate and cleaner signal. Such an interface requires the wall kit pinout specifications taught by Diab.

Claims 19, 20, Guntersdorfer teaches a communication network for providing simultaneous data and analog telephone communication between a central switching center and subscriber station. Diab teaches the use of digital packet Ethernet incorporating a phantom circuit. Guntersdorfer and Diab does not teach a substitute socket outlet.

Bux teaches a substitute socket outlet (column 3 lines 1-9, column 3 lines 53-60) referenced by the wall receptacle to facilitate the pre-wiring of the building. Diab teaches a wall connector is a plug assembly (FIG. 2B) referenced a RJ-45 plug assembly 10 which is usable at a wall outlet, including a plug having at least two pairs of contacts each connected to primary windings of a respective one of the signal transformers (FIG. 6) referenced by pins 1, 2, 3 and 6 connecting to signal transformers

18a and 18b, for removably coupling with a socket outlet of a data network (FIG. 2B) referenced by socket 10 and coupler 44.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transformers to a wall receptacle as taught by Bux to the phantom Ethernet interface network of Guntersdorfer and Diab for the purpose of combining functions within an existing outlet.

### ***Response to Arguments***

The arguments presented has been considered but deemed not persuasive.

Guntersdorfer and Diab both present phantom circuits for transmission of data streams. Guntersdorfer teaches the data streams comprising of video and telephonic information. Diab teaches the data streams of Ethernet and power for telephonic communication. It is obvious to modify the invention of Guntersdorfer for Ethernet communication as disclosed by Diab. The additional limitation of "packet based digital data" is anticipated by the art of Diab which discloses the use of Ethernet protocol which is a packet based digital protocol used in local area networks. The rejections are maintained in regards to the art as presented by Guntersdorfer and Diab. The rejections concerning the wall connector limitations are now presented with the art of Bux (Patent Number 4510493).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Shew whose telephone number is 571-272-3137. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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